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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,578	03/11/2004	Dai Hyun Kim	HI-0192	4811
<div>34610 7590 09/25/2007</div> <div>KED & ASSOCIATES, LLP</div> <div>P.O. Box 221200</div> <div>Chantilly, VA 20153-1200</div>				
			EXAMINER	
			TRAN, MY CHAU T	
			ART UNIT	PAPER NUMBER
			2629	
			MAIL DATE	DELIVERY MODE
			09/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/797,578	KIM ET AL.	
	Examiner	Art Unit	
	MY-CHAU T. TRAN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9 is/are rejected.
- 7) ☒ Claim(s) 4-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application and Claims Status

1. Applicant's amendment and response filed 08/08/2007 are acknowledged and entered.
2. Claims 1-19 were pending. Applicants have amended claims 1, 3-5, and 9. No claims were added and/or cancelled. Therefore, claims 1-19 are currently pending. Claims 10-19 are drawn to non-elected species and/or inventions and thus these claims remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b), there being no allowable generic claim. Accordingly, claims 10-19 are under consideration in this Office Action.

Status of Claim(s) Objection(s) and /or Rejection(s)

3. The rejections of claims 1-9 under 35 USC 112, second paragraph, as being indefinite have been withdrawn in light of applicant's amendments of claims 1, 3-5, and 9.
4. The rejections of claims 1-9 under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101 has been withdrawn in light of applicant's amendments of claims 1, 3-5, and 9.
5. The rejection of claims 1 and 2 under 35 USC 102(b) as being anticipated by Awamoto et al. (US Patent 5,898,414) has been withdrawn in light of applicant's arguments (see page 10, filed 08/08/2007) and amendments of claim 1.

Maintained Rejection(s)

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Tajima et al. (US Patent 5,818,419).

For ***claim 1***, Tajima et al. disclose a method for driving a plasma display panel (see e.g. Abstract; col. 1, lines 6-13; col. 4, line 43 thru col. 5, line 12). The method of driving the display device wherein the picture is display through a frame having a plurality of sub-frames (refers to instant claimed limitation of n^{th} frame and $(n+1)^{\text{th}}$ frame) that is time-divided in accordance with the weight value of the gray scale (refers to instant claimed limitation of brightness weighting value) for each sub-frames comprises the step of selecting the number of sub-frames that can be displayed within a single period for the single frame in accordance with a frequency of a vertical synchronization signal (refers to instant claimed arranging step)(see e.g. col. 4, line 60 thru col. 5, line 7; col. 8, line 65 thru col. 9, line 30; figs. 2-4). In addition, Tajima et al. disclose the method step of rearranging the sub-frames in a set (refers to instant claimed one frame period) in optimal order such that the luminance is dispersed along the time axis, i.e. a sub-frame having a high luminance is located in the center and a plurality of subframes having the same luminance are located separately (refers to instant claimed setting step)(see e.g. col. 13, line 44 thru col. 14, line 3; col. 17, lines 5-21; fig. 15).

For ***claim 2***, Tajima et al. disclose that the sub-frame period comprises a reset period, an addressing period, and a sustained period (see e.g. col. 10, lines 15-32; fig. 37).

Therefore, the method of Tajima et al. does anticipate the instant claimed invention.

Response to Arguments

8. Applicant's arguments directed to the above 102(b) rejection were considered but they are not persuasive for the following reasons. Please note that the above rejection has been modified from its original version to more clearly address applicant's newly amended and/or added claims and/or arguments.

[1] Applicant contends that '*Tajima does not disclose or teach "setting one frame period of at least one of the n th frame and the $(n+1)^{th}$ frame variably for the n th frame and the $(n+1)^{th}$ frame to have a same period of a brightness expression period"*', and support this assertion based on the disclosure of Tajima et al. that the method is called the duplicated subframe method. Thus the method of Tajima et al. does not anticipate the instant claimed invention.

This is not found persuasive for the following reasons:

[1] The examiner respectfully disagrees. It is the examiner's position that the method of Tajima et al. does anticipate the instant claimed invention because Tajima et al. teach the instant claimed setting step. Tajima et al. disclose the method step of rearranging the sub-frames in a set (refers to instant claimed one frame period) in optimal order such that the luminance is dispersed along the time axis, i.e. a sub-frame having a high luminance is located in the center and a plurality of subframes having the same luminance are located separately (refers to instant claimed setting step)(see e.g. col. 13, line 44 thru col. 14, line 3; col. 17, lines 5-21; fig. 15). Moreover although the method of Tajima et al. is called the duplicated subframe method (see Tajima: col. 13, lines 44-46), its method steps still anticipates the instant claimed method steps as discussed in paragraph 7 above.

Accordingly, the teachings of Tajima et al. do anticipate the method of the instant claims, and the rejection is maintained.

9. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanazawa (US Patent 5,835,072).

For **claim 1**, Kanazawa discloses a driving method for plasma display (see e.g. Abstract; col. 1, lines 7-14; col. 2, lines 34-67). The method of driving the plasma display wherein the one frame is divided into a plurality of subfields (refers to instant claimed limitation of n^{th} frame and $(n+1)^{\text{th}}$ frame) in accordance with the weight value of the gray scale (refers to instant claimed limitation of brightness weighting value) and the frame is control by synchronization signals such as a vertical synchronization signal (refers to instant claimed arranging step)(see e.g. col. 5, lines 47-65; fig. 4). In addition, Kanazawa discloses the method step of varying the lengths of subfields, i.e. the sustain period, and/or the writing voltage, i.e. the address period within one frame (refers to instant claimed setting step)(see e.g. col. 3, lines 1-49; col. 9, line 1 thru col. 10, line 20).

For **claim 2**, Kanazawa discloses that each subfield comprises a reset period, an addressing period, and a sustained period (see e.g. col. 6, lines 11-34; figs. 5 and 6).

For **claims 3 and 9**, Kanazawa discloses that within a frame period the address period, the sustain period, or both can be vary (see e.g. col. 3, lines 1-49; col. 9, line 1 thru col. 10, line 20).

Therefore, the method of Kanazawa does anticipate the instant claimed invention.

Response to Arguments

10. Applicant's arguments directed to the above 102(b) rejection were considered but they are not persuasive for the following reasons. Please note that the above rejection has been modified from its original version to more clearly address applicant's newly amended and/or added claims and/or arguments.

[1] Applicant alleges that the method of Kanazawa does not anticipate the instant claimed invention because *'Kanazawa does not teach nor suggest, "setting one frame period of at least one of the n^{th} frame and the $(n+1)^{\text{th}}$ frame variably for the n^{th} frame and the $(n+1)^{\text{th}}$ frame to have a same period of a brightness expression period"'*, and support this assertion based on the disclosure of Kanazawa in column 11, line 39, i.e. *'a luminance level should be the same among the first, second, and third periods.'* Therefore, the method of Kanazawa does not anticipate the instant claimed invention.

This is not found persuasive for the following reasons:

[1] The examiner respectfully disagrees. It is the examiner's position that the method of Kanazawa does anticipate the instant claimed invention. First, the method of Kanazawa does teach the instant claimed setting step. Kanazawa discloses the method step of varying the lengths of subfields, i.e. the sustain period, and/or the writing voltage, i.e. the address period within one frame (refers to instant claimed setting step)(see e.g. col. 3, lines 1-49; col. 9, line 1 thru col. 10, line 20). Second, the disclosure of Kanazawa, i.e. column 11, line 39, refers to the second embodiment for the method of Kanazawa and not the first embodiment for which the rejection is based, i.e. it is the second embodiment that the luminance is the same for the first, second, and third period.

Consequently, the teachings of Kanazawa do anticipate the method of the instant claims, and the rejection is maintained.

Allowable Subject Matter

11. Claims 4-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T. TRAN whose telephone number is 571-272-0810.

Art Unit: 2629

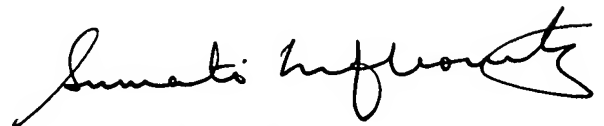
The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00;

Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/My-Chau T. Tran/
Patent Examiner
Art Unit 2629
September 11, 2007



SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER